

REMARKS

As a preliminary matter, with regard to the drawings, Applicant has included herewith a marked-up copy of Figure 7, with the proposed changes in red. Approval of the proposed drawing changes is respectfully requested.

Applicant appreciates the Examiner's indication that Claims 7-10 has been allowed.

Claims 1-3 stand rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent No. 6,262,950 to Narahara et al. Applicant respectfully traverses this rejection.

Applicant respectfully submits that all of the features of the present invention are not disclosed in the cited reference. More specifically, the Narahara et al. reference fails to disclose an optical storage medium in which, *inter alia*, the track addresses of the land portions (the "first track addresses") and the track addresses of the groove portions (the "second track addresses") are both assigned consecutive numbers, but where the consecutive numbers of the groove addresses are given independently of the consecutive numbers of the land addresses, as defined in independent Claim 1. In addition, with regard to independent Claim 3, the Narahara et al. reference fails to disclose an optical storage medium in which, *inter alia*, the consecutive numbers of the groove addresses are consecutive to the consecutive numbers of the land addresses in the same group, and the consecutive numbers

of the land addresses in any one of the groups is consecutive to the consecutive numbers of the groove addresses in the immediately preceding group.

In conventional land/groove recording optical storage mediums, the land tracks and the groove tracks are alternately given track addresses. Thus, for example, the first groove track is addressed as "0," the first land track is addressed as "1," the next groove track is addressed as "2," the next land track is addressed as "3," etc. However, recording/reproducing conditions differ depending upon whether a land track or a groove track is being accessed. Therefore, adequate time for changing the recording/reproducing conditions is required when switching from a land track to a groove track. Since operating speeds of CPU's have increased, there is a chance that the operating system of the CPU could be hung up because of the time required to switch from the land track conditions to the groove track conditions.

In order to solve this problem, the present invention provides a system of addressing the land tracks and the groove tracks that minimizes the number of switches between land tracks and groove tracks and/or reduces the number of head movements in the radial direction, both of which allow for increased access speed.

More specifically, one example of an embodiment of the invention defined by Claim 1 is shown in Figure 6. As shown in this figure, the groove tracks are numbered (i.e., addressed) sequentially from 1 to N_n (such as 0, 1, 2, 3, etc.), and the land tracks are also numbered sequentially from 1 to N_n (such as 0, 1, 2, 3, etc.). However, as defined in Claim

1, the groove tracks are consecutively) numbered \ independently of the consecutively numbered land tracks. In contrast, in a conventional medium, the land tracks and the groove tracks are numbered alternately in a consecutive manner (i.e., they are addressed as follows:

groove track 0, land track 1, groove track 2, land track 3, groove track 4, land track 5, etc.).

Since the addresses of the land tracks utilizing the numbering system of a conventional medium rely upon adding one to the adjacent groove track (and vice versa for the groove tracks), the track addresses of the land tracks and the groove tracks are not independent of each other in a conventional medium.

Although the Examiner has directed Applicant's attention to several portions of the disclosure of the Narahara et al. reference, none of these portions describe the numbering method for defining addresses for the land tracks and the groove tracks. In fact, the Narahara et al. reference fails to disclose any method of numbering the tracks of the medium. Accordingly, since the method of addressing the tracks defined in Claim 1 is not disclosed in the Narahara et al. reference, Applicant respectfully requests the withdrawal of this §102(e) rejection of Claim 1 and associated dependent Claim 2.

With regard to independent Claim 3, one example of an embodiment defined by this claim is shown in Figure 7. In this embodiment, the land tracks and the groove tracks are divided into a plurality of groups, such as a plurality of bands which each include a certain number of alternating land tracks and groove tracks. Within a group, the groove tracks are consecutively numbered and the land tracks are also consecutively numbered,

starting with the number after the highest numbered groove track. For example, in band 0, the groove tracks may be numbered from 1-10, and the land tracks would then be numbered from 11-20. Such a system is then continued for all bands (e.g. in band 1, the groove tracks are numbered from 21-30, and the land tracks are numbered from 31-40; in band 2, the groove tracks are numbered from 41-50, and the land tracks are numbered from 51-60; etc.).

The Narahara et al. reference fails to disclose such a numbering system. As mentioned above, this reference fails to disclose any system of numbering the land and groove tracks for use as track addresses. Accordingly, as all of the features defined in Claim 3 are not disclosed in the Narahara et al. reference, Applicant respectfully requests the withdrawal of this §102(e) rejection of Claim 3.

Claim 3 stands rejected under 35 U.S.C. §103 as being unpatentable over United States Patent No. 6,262,950 to Narahara et al. in view of United States Patent No. 6,215,758 to Horimai et al. Applicant also believes that the Examiner intended to make a §103 rejection of Claims 4-6 based on these same references. Accordingly, Applicant will respond to this rejection as though it were made to Claims 3-6. Applicant respectfully traverses this rejection.

As mentioned above, the Narahara et al. reference fails to disclose the track numbering system defined in Claim 3. Additionally, the Examiner has acknowledged that the Narahara et al. reference fails to disclose land tracks and groove tracks divided into groups. To remedy this deficiency, the Examiner relied upon the Horimai et al. reference. However,

the Horimai et al. reference is also silent with regard to the track numbering system defined in independent Claim 3. Accordingly, as all of the features defined in independent Claim 3 and associated Claim 4 are not disclosed or suggested in Narahara et al. or Horimai et al., Applicant respectfully requests the withdrawal of this §103 rejection of Claims 3 and 4.

With regard to independent Claim 5, this claim defines a track numbering system that is very similar to that defined in Claim 3, except that the order for numbering the land tracks and the groove tracks is reversed. For example, the numbering system of a medium defined by Claim 5 may include the following: in band 0, the land tracks may be numbered from 1-10, and the groove tracks would then be numbered from 11-20. Such a system is then continued for all bands (e.g. in band 1, the land tracks are numbered from 21-30, and the groove tracks are numbered from 31-40; in band 2, the land tracks are numbered from 41-50, and the groove tracks are numbered from 51-60; etc.). Such a numbering system is not disclosed or suggested in either Narahara et al. or in Horimai et al. Accordingly, Applicant respectfully requests the withdrawal of this §103 rejection of independent Claim 5 and associated Claim 6.

For all of the above reasons, Applicant requests reconsideration and allowance of the claimed invention. Should the Examiner be of the opinion that a telephone conference would aid in the prosecution of the application, or that outstanding issues exist, the Examiner is invited to contact the undersigned.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.



July 10, 2003

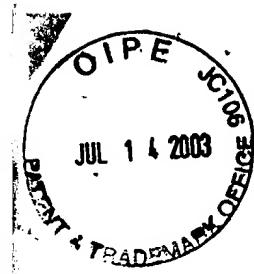
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Approved
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FIG. 7

GROOVE	TRACK NUMBER	LAND	TRACK NUMBER
BAND 0	0	BAND 0	N1
BAND 1	N1-1		N2-1
BAND 2	N2	BAND 1	N3
BAND 3	N3-1		N4-1
	N4	BAND 2	N5
	N5-1		N6-1
	N6	BAND 3	N7
	N7-1		N8-1
	⋮	⋮	⋮
BAND n	Nn-2	BAND n	Nn-1
	Nn-1-1		Nn